

INTERNATIONAL SEARCH REPORT

Internat Application No
PCT/03/03833

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16L55/1645

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 154 194 A (JANSSEN FRANZ) 14 November 2001 (2001-11-14)	1-7, 11, 15, 16, 18, 19, 26, 29, 32, 36, 40, 42-45, 47, 51, 52
A	column 1, line 3 -column 8, line 19; figures 1-3	8-10, 12-14, 17, 20-25, 27, 28, 37, 41

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Date of the actual completion of the international search

Date of mailing of the international search report

5 November 2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	the whole document	4-6, 8-11, 17, 20, 22, 25-28, 35, 37, 40, 41, 46, 48, 50, 52
X	DE 199 48 288 A (JT ELEKTRONIK GMBH) 12 April 2001 (2001-04-12)	1-3, 7, 8, 11-16, 18, 19, 32, 36, 42-44, 47, 51
A	column 4, line 12 - line 38	4, 5, 9, 10, 17, 20, 21, 26, 33, 40, 45, 48
	column 5, line 56 - line 67; figures 1, 3	---
X	EP 0 909 783 A (MAAGH LEITUNGSBAU GMBH) 21 April 1999 (1999-04-21)	1-3, 7, 8, 11-16, 18-24, 26-29, 32, 36, 42-45, 47, 51
A	column 1, line 3 -column 11, line 22; figures 2, 4	4-6, 9, 10, 17, 25
X	WO 01 38691 A (HEIJNEN WILHELMUS HUBERTUS PAU ;MORATO PENA MARIA JOAO RAMOS C (NL) 31 May 2001 (2001-05-31)	1, 15-21, 36, 42-44, 51
A	column 2, line 34 -column 4, line 35; figure	2-14, 22, 29, 30, 45, 46

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